First Hit Fwd Refs

Previous Doc Next Doc Go to Doc#

Generate Collection

Print

L1: Entry 1 of 3

File: USPT

Aug 29, 2000

US-PAT-NO: 6112241

DOCUMENT-IDENTIFIER: US 6112241 A

TITLE: Integrated network interconnecting device and probe

DATE-ISSUED: August 29, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Abdelnour; George Michel Raleigh NC
Linville; John Walter Durham NC
Suffern; Edward Stanley Chapel Hill NC
Warren; Jeffrey Robert Apex NC

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

International Business Machines Corporation Armonk NY 02

APPL-NO: 08/ 955276 [PALM]
DATE FILED: October 21, 1997

INT-CL: [07] <u>G06</u> <u>F</u> <u>15/173</u>

US-CL-ISSUED: 709/224; 709/217, 709/249, 370/218, 370/219, 370/220, 370/233 US-CL-CURRENT: 709/224; 370/218, 370/219, 370/220, 370/233, 709/217, 709/249

Search Selected

FIELD-OF-SEARCH: 395/200.54, 395/200.47, 395/200.79, 364/550, 364/551.01, 709/224, 709/217, 709/249, 710/131, 370/218, 370/219, 370/220, 370/233, 370/234, 370/241, 370/244, 370/250,

370/360

PRIOR-ART-DISCLOSED:

### U.S. PATENT DOCUMENTS

Search ALL

Clear

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
5101402	March 1992	Chiu et al.	370/17
5231593	July 1993	Notess	364/550
5251152	October 1993	Notess	364/550
5274631	December 1993	Bhardwaj	370/60
5305305	April 1994	Harper et al.	370/13
5521907	May 1996	Ennis, Jr. et al.	370/17
5530842	June 1996	Abraham et al.	395/500

	5572674	November 1996	Ernst	395/200.1
	<u>5586251</u>	December 1996	Coleman et al.	395/183.19
$\Box$	5590120	December 1996	Vaishnavi et al.	370/254
	5606664	February 1997	Brown et al.	395/200.1
	5621664	April 1997	Phaal	364/551.01
	5649107	July 1997	Kim et al.	395/200.11
	5715247	February 1998	Nara et al.	370/360
$\Box$	5717858	February 1998	Shtayer et al.	395/200.11
<b></b>	5751698	May 1998	Cushman et al.	370/252
	5764626	June 1998	VanDervort	370/232
$\Box$	5790786	August 1998	Wakeman et al.	395/200.02
1	5802040	September 1998	Park et al.	370/232
	5838677	November 1998	Kozaki et al.	370/389
	5867483	February 1999	Ennis, Jr. et al.	370/252
	5887000	March 1999	Adachi et al.	714/712

## OTHER PUBLICATIONS

"Axon Tackles Switch Traffic Monitoring" by Claudia Graziano, Lantimes Online Apr. 24, 1995. Market Data: IDC 1995 Worldwide Hub and LAN Switch Market Share, 3COM IDC 1995. HP J2980A AdvanceStack 10/100 LAN Switch-16.

ART-UNIT: 278

PRIMARY-EXAMINER: Maung; Zarni

ASSISTANT-EXAMINER: Najjar; Saleh

ATTY-AGENT-FIRM: Cockburn; Joscelyn G.

## ABSTRACT:

A Local Area Network (LAN) Switch includes conventional switching functions and integrated Remote Monitoring (RMON) Universal Feature Card (UFC). The UFC allows simultaneously statistically monitoring the traffic on all ports, 100% monitoring of the traffic on one port, and monitoring the internal LAN Switch switching fabric to obtain RMON statistics about the operation of networks attached to the LAN Switch.

20 Claims, 8 Drawing figures

Previous Doc Next Doc Go to Doc#

First Hit Fwd Refs

Previous Doc Next Doc Go to Doc#

Generate Collection Print

L1: Entry 2 of 3

File: USPT

Aug 22, 2000

US-PAT-NO: 6108782

DOCUMENT-IDENTIFIER: US 6108782 A

TITLE: Distributed remote monitoring (dRMON) for networks

DATE-ISSUED: August 22, 2000

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Fletcher; Rick San Jose CA Banthia; Prakash Santa Clara CA

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

3COM Corporation Santa Clara CA 02

APPL-NO: 08/ 882207 [PALM] DATE FILED: June 24, 1997

### PARENT-CASE:

This application claims priority from provisional patent application 60/040,876, filed Mar. 21, 1997 now expired abandoned. This application is a continuation-in-part of Ser. No. 08/766,274LE AlEU ()757 Pk2-D15 306-3101, filed Dec. 13, 1996 now abandoned.

INT-CL: [07]  $\underline{H04}$   $\underline{L}$   $\underline{9/00}$ ,  $\underline{G06}$   $\underline{F}$   $\underline{11/30}$ 

US-CL-ISSUED: 713/153; 713/201, 713/202, 709/224, 709/235, 370/245, 370/252 US-CL-CURRENT: 713/153; 370/245, 370/252, 709/224, 709/235, 713/201, 713/202

Search Selected

FIELD-OF-SEARCH: 709/224, 709/235, 709/227, 709/230, 709/248, 370/252, 370/241, 370/245,

713/201, 713/202, 713/151, 713/153, 713/160, 713/162

PRIOR-ART-DISCLOSED:

## U.S. PATENT DOCUMENTS

Search ALL

Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
	4817080	March 1989	Soha	370/252
	5251152	October 1993	Notess	709/224
$\Box$	5450601	September 1995	Okuda	709/224
	5781703	July 1998	Desai et al.	706/50
$\Box$	5961596	October 1999	Takubo et al.	709/224

US-CL

# Record Display Form

FOREIGN-PAT-NO PUBN-DATE COUNTRY
0 573 248 A1 December 1993 EP
0 726 664 A2 August 1996 EP
WO 96/38955 December 1996 WO

### OTHER PUBLICATIONS

Greenfield, "Network Management Filters Down to the Desktop," Data Communications, vol. 20, No. 13, Sep. 1991, pp. 39, 40, 42.

Jander, "Midlevel Managers Ease SNMP Information Overload," Data Communications, vol. 22, No. 17, Nov. 1993, pp. 53, 54, 56, 58.

Jander, "Lightening the Load on Management Stations," Data Communications, vol. 23, No. 9, Jun. 1994, pp. 45, 46.

Johnson, "A three-Layered Solution for Managing the Enterprise," Data Communications, vol. 24, No. 8, Jun. 1995, pp. 41, 42.

Larsen, "Mastering Distributed Domains via the Web," Data Communications, vol. 25, No. 7, May 1996, pp. 36, 38.

Lee, "A Distributed Network Management System," Proceedings of the Global Telecommunications Conference, San Francisco, CA, Nov. 28-Dec. 2, 2994, vol. 1, Nov. 1994, Institute of Electronics Engineers, pp. 548-552.

Roberts, "RMON Adapters Shed Light on LAN's," Data Communications, vol. 25, No. 6, May, 1996, pp. 43, 44.

Schwager, "Remote Network Monitoring MIB," Annual Review of Communications, National Engineering Consortium, Chicago, IL, vol. 46, Jan. 1992, pp. 752-754.

Stallings, "Patching the Cracks in SNMP," Byte, vol. 21, No. 8, Aug. 1996, pp. 55-56.

ART-UNIT: 277

PRIMARY-EXAMINER: Barron, Jr.; Gilberto

ATTY-AGENT-FIRM: Wagner Murabito & Hao LLP

### ABSTRACT:

Distributed remote monitoring (dRMON) of network traffic and performance uses distributed nodes to collect traffic statistics at distributed points in the network. These statistics are forwarded to collectors which compile the statistics to create combined views of network performance. A collector may mimic'a prior art, non-distributed, network probe and may interact with network management software as though it were a stand alone network probe thereby simplifying a user's interaction with the distributed system. The invention is designed to work in accordance with a variety of standard network management protocols including SNMP, RMON, and RMON2 but is not limited to those environments. The invention has applications in a variety of communication system environments including local area networks, cable television distribution systems, ATM systems, and advanced telephony systems. A specific embodiment of the invention solves is particularly optimized to work in LAN environments with end systems running under Windows-compatible network operating systems.

26 Claims, 11 Drawing figures

Previous Doc Next Doc Go to Doc#

Record Display Form

First Hit Fwd Refs
End of Result Set

Previous Doc

Next Doc

Go to Doc#

min or staduce the

Generate Collection

Print

L1: Entry 3 of 3

File: USPT

Aug 18, 1998

US-PAT-NO: 5796721

DOCUMENT-IDENTIFIER: US 5796721 A

\*\* See image for <u>Certificate of Correction</u> \*\*

TITLE: Method and system for monitoring fieldbus network with dynamically alterable packet

filter

DATE-ISSUED: August 18, 1998

INVENTOR-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY

Gretta, Jr.; Robert E. Austin TX

ASSIGNEE-INFORMATION:

NAME CITY STATE ZIP CODE COUNTRY TYPE CODE

National Instruments Corporation Austin TX 02

APPL-NO: 08/ 666117 [PALM] DATE FILED: June 21, 1996

INT-CL: [06]  $\underline{H04}$   $\underline{J}$   $\underline{3/14}$ ,  $\underline{G06}$   $\underline{F}$   $\underline{11/00}$ 

US-CL-ISSUED: 370/245; 395/184.01, 364/551.01 US-CL-CURRENT: 370/245; 702/122, 702/190, 714/47

FIELD-OF-SEARCH: 370/241, 370/245, 370/252, 370/469, 371/20.1, 395/185.01, 395/185.1,

395/184.01, 364/551.01, 364/552, 345/339, 345/340

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search ALL

Clear

PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL

Search Selected

	5134574	July 1992	Beaverstock et al.	364/551.01
	5375070	December 1994	Hershey et al.	364/550
	5437009	July 1995	Lane	345/349
	5442639	August 1995	Crowder et al.	371/20.1
1	5568471	October 1996	Hershey et al.	370/245

### OTHER PUBLICATIONS

Fieldbus Foundation Fieldbus Specification System Architecture, By Fieldbus Foundation, Aug. 28, 1995, pp. 1-40.

ART-UNIT: 271

PRIMARY-EXAMINER: Jung; Min

ATTY-AGENT-FIRM: Conley, Rose & Tayon Hood; Jeffrey C.

### ABSTRACT:

An improved system and method for monitoring a fieldbus network. The improved method and monitor utilize multiple filters with the capability of simultaneously capturing packets from more than one fieldbus and the ability to apply multiple filters to any single fieldbus. Filtered packets are captured as capture documents and stored in the monitor's memory storage. Filtered packets can be displayed, in real time, on the monitor's display screen. The improved monitor is configured to perform post-capture filtering of captured packets. Post-capture filtering does not destroy data. The improved monitor permits dynamic altering of filter settings. Using this feature, the user can initiate capture using a first filter settings, alter the filter setting while packets are being captured, and apply the altered filter setting to the fieldbus without terminating capture. The altered filtered settings are applied to the fieldbus substantially instantaneously and the packets captured under the altered filter settings are displayed.

10 Claims, 17 Drawing figures

Previous Doc Next Doc Go to Doc#